

Applicant: Phillips et al.

Application Serial No. 09/735,363

Request for Continued Examination and Response to Final Office Action

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### AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

#### Listing of Claims

Claim 1. (Currently amended) A composition, comprising a 2 to 20 base 3'-OH, 5'-OH synthetic phosphodiester nucleotide sequence, wherein the nucleotide sequence consists of a sequence selected from the group consisting of  $(G_xT_y)_n$ ,  $(T_yG_x)_n$ ,  $a(G_xT_y)_n$ ,  $a(T_yG_x)_n$ ,  $(G_xT_y)_nb$ ,  $(T_yG_x)_nb$ ,  $a(G_xT_y)_nb$ , and  $a(T_yG_x)_nb$ , wherein x and y ~~is an~~ are each an integer between 1 and 7, n is an integer between 1 and 12, a and b are one or more As, Cs, Gs or Ts, provided bases in the sequence are between 2 and 20 in total, and a pharmaceutically acceptable carrier, ~~wherein the composition is useful for inducing a response in an animal having cancer when administered in an effective amount to the animal having cancer.~~

Claim 2. (Previously amended) The composition of Claim 1, wherein the sequence is between 2 and 15 bases.

Claim 3. (Previously amended) The composition of Claim 2, wherein the sequence is between 2 and 10 bases.

Claim 4. (Previously amended) The composition of Claim 3, wherein the sequence is between 2 and 7 bases.

Claim 5. (Previously amended) The composition of Claim 1, further comprising a chemotherapeutic agent.

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Claim 6. (Previously cancelled)

Claim 7. (Currently amended) The composition of Claim 1, wherein the phosphodiester nucleotide sequence is selected from the group consisting of SEQ ID NOs: ~~7-18, 23-47, 50-66, and 81-83~~ 7 to 18, 23 to 47, 50 to 66, and 81 to 83.

Claim 8. (Currently amended) The composition of Claim 1, wherein the phosphodiester nucleotide sequence is selected from the group consisting of SEQ ID NOs: ~~7-10, 22-65, 70-75,~~ 7 to 10, 22 to 65, 70 to 75, 79 and 80.

Claim 9. (Previously cancelled)

Claim 10. (Currently amended) The composition of Claim 5, wherein the chemotherapeutic agent is selected ~~from the group consisting of antimetabolites, alkylating agents and hormone antagonists~~ an antimetabolite, an alkylating agent, or a hormone antagonist.

Claims 11-20. (Cancelled)

Claim 21. (Previously cancelled)

Claims 22-28. (Cancelled)

Claims 29-41. (Previously cancelled)

Claims 42-45. (Cancelled)

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Claim 46. (New) A composition comprising a 2 to 7 base 3'-OH, 5'-OH synthetic phosphodiester nucleotide sequence, wherein the nucleotide sequence consists of a sequence selected from the group consisting of  $(G_xT_y)_n$ ,  $(T_yG_x)_n$ ,  $a(G_xT_y)_n$ ,  $a(T_yG_x)_n$ ,  $(G_xT_y)_nb$ ,  $(T_yG_x)_nb$ ,  $a(G_xT_y)_nb$ , and  $a(T_yG_x)_nb$ , wherein x and y are each an integer between 1 and 6, n is an integer between 1 and 3, a and b are one or more As, Cs, Gs or Ts, provided bases in the sequence are between 2 and 7 in total, and a pharmaceutically acceptable carrier.

Claim 47. (New) A composition comprising a 6 base 3'-OH, 5'-OH synthetic phosphodiester nucleotide sequence, wherein the nucleotide sequence consists of a sequence selected from the group consisting of  $(G_xT_y)_n$ ,  $(T_yG_x)_n$ ,  $a(G_xT_y)_n$ ,  $a(T_yG_x)_n$ ,  $(G_xT_y)_nb$ ,  $(T_yG_x)_nb$ ,  $a(G_xT_y)_nb$ , and  $a(T_yG_x)_nb$ , wherein x and y are each an integer between 1 and 5, n is an integer between 1 and 3, a and b are one or more As, Cs, Gs or Ts, provided bases in the sequence are 6 in total, and a pharmaceutically acceptable carrier.

Claim 48. (New) The composition of Claim 46, wherein the phosphodiester nucleotide sequence is selected from the group consisting of SEQ ID Nos: 7 to 10, 23 to 65, 79, and 80.

Claim 49. (New) The composition of Claim 47, wherein the phosphodiester nucleotide sequence is selected from the group consisting of SEQ ID Nos: 9, 10, 25, 41, 45, and 46.

Claim 50. (New) The composition of Claim 46, further comprising a chemotherapeutic agent.

Claim 51. (New) The composition of Claim 47, further comprising a chemotherapeutic agent.

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Claim 52. (New) The composition of Claim 48, further comprising a chemotherapeutic agent.

Claim 53. (New) The composition of Claim 49, further comprising a chemotherapeutic agent.

Claim 54. (New) The composition of Claim 50, wherein the chemotherapeutic agent is an antimetabolite, an alkylating agent, or a hormone antagonist.

Claim 55. (New) The composition of Claim 51, wherein the chemotherapeutic agent is an antimetabolite, an alkylating agent, or a hormone antagonist.

Claim 56. (New) The composition of Claim 52, wherein the chemotherapeutic agent is an antimetabolite, an alkylating agent, or a hormone antagonist.

Claim 57. (New) The composition of Claim 53, wherein the chemotherapeutic agent is an antimetabolite, an alkylating agent, or a hormone antagonist.

Claim 58. (New) The composition of Claim 1, wherein the phosphodiester nucleotide sequence is selected from the group consisting of SEQ ID NOs: 9, 10, 25, 41, 45, and 46.

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